Newberg-Dundee Bypass – Phase One
TIGER III Grant Application

Oregon Department of Transportation
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TIGER III Application
Oregon Department of Transportation
Newberg-Dundee Bypass Phase One
Type of Project: Highway/Bicycle-Pedestrian
Project Location: Yamhill County, Oregon
Funding Amount Requested: $17,000,000
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Newberg-Dundee Bypass Phase One  
TIGER III Grant Application  

ABSTRACT  

The Oregon Department of Transportation (ODOT), working with Yamhill County and the cities of Newberg and Dundee, proposes to build an 11-mile, four-lane access controlled expressway (Bypass) with four interchanges and related local circulation changes to reduce chronic and severe congestion on Oregon (OR) 99W through Newberg and Dundee. The proposed Bypass project is located along the south side of Newberg and Dundee and extends from the area of Rex Hill east of Newberg to the intersection of OR 99W and OR 18 near the city of Dayton.  

There is currently insufficient funding available to complete the entire Bypass project. ODOT is, therefore, developing a Phase One project that would include a shorter two-lane Bypass extending from OR 219 in Newberg to a connection with OR 99W just southwest of Dundee. The project will also include bicycle and pedestrian facilities that will greatly improve non-auto mobility in the Newberg-Dundee area. This Phase One project has independent utility and will have a direct positive impact on the community by working to achieve the project goals of reducing congestion, thereby improving livability, in the downtown areas of Newberg and Dundee, improving local and regional mobility, and improving transportation safety.  

This is a rural project as defined by the TIGER III program in an economically distressed community (Yamhill County and Newberg). The project has the overwhelming support of the local jurisdictions, including recent adoption of resolutions by Yamhill County and the cities of Newberg, Dundee, and McMinnville stating their intent to contribute to the local share of the project costs.  

The Phase One project is proposed to be funded from federal, state, and local sources. The Oregon Legislature has provided $192 million through its 2009 Jobs and Transportation Act. Previously programmed federal funds, along with a commitment of $20 million from the local agencies make up the remainder of the available funding for the project. ODOT is requesting $17 million through TIGER III to complete the funding for the Phase One project and to add bicycle/pedestrian elements that complement the Phase One Bypass by helping take local trips off of OR 99W.  

ODOT will be prepared to obligate the TIGER III funds in April 2012, after completion of the environmental process and issuance of the Record of Decision, complete the project design and right-of-way acquisition, and begin construction in the summer of 2014.
INTRODUCTION

Yamhill County residents and the Oregon Department of Transportation (ODOT) have discussed ways to relieve traffic congestion on Oregon 99W (OR 99W) through the cities of Newberg and Dundee for many years. This area experiences what is likely the worst congestion outside the boundaries of a metropolitan planning organization anywhere in Oregon (the Newberg-Dundee area has been identified as #6 on a list of the top 50 transportation choke points in Oregon\(^1\). The top five choke points are all located in the Portland metropolitan area). Traffic analysis prepared for the area over the years has indicated the need for a state highway bypass to solve congestion problems on OR 99W. Newberg, Dundee, and surrounding areas in Yamhill County, Oregon have experienced substantial growth over the past two decades. Newberg, the second largest city in the county, currently has a population of about 22,000 residents, while Dundee has about 3,200 residents. OR 99W serves as the “main street” for both cities. OR 99W connects Newberg and Dundee to the Portland metropolitan area to the northeast and to McMinnville (population 32,187) and the central Oregon Coast to the southwest (Figure 1). Because the highway is the most direct route between the northern Willamette Valley and communities on the central Oregon Coast, traffic has steadily increased as the area has grown. Weekly commuters use OR 99W to travel between Yamhill County and the Portland metropolitan area. Almost 58% of the population of Yamhill County (99,193) is directly served by OR 99W. Commuting, tourist, and through freight truck movement, particularly to and from the coast, I-5 corridor, and/or the Portland metropolitan area, is adversely affected by congested travel conditions in the corridor on a daily basis.

Existing traffic on OR 99W in downtown Newberg (a six-lane couplet) is over 45,000 vehicles per day and is projected to reach 63,000 vehicles in 2030. Elsewhere, in Newberg, outside the downtown area, OR 99W is a four-lane roadway. In Dundee, existing traffic on the three-lane section is as high as 32,000 vehicles per day and projected to be about 50,000 vehicles per day in 2030. In that same period, travel time on OR 99W is projected to increase by 50% in the PM peak. Existing and projected traffic volumes and peak period operations in the study area are summarized in Table 1. This shows that OR 99W is already over capacity (with a volume to capacity ratio of >1.0\(^2\)) at Fox Farm Road. By 2030, three locations on the highway will be over capacity, resulting in even more severe congestion.

The daily traffic is a combination of commuters from Yamhill County to the Portland metropolitan area, through and local freight (approximately 7% of the total traffic is greater than 2-axle vehicles), and regional/tourist traffic. Weekend traffic volumes are also high since OR 99W is the major travel route to Yamhill County tourist destinations (e.g., wineries, Evergreen Aviation Museum complex), the central Oregon Coast, and two Native American Casinos (Spirit Mountain in Grand Ronde and Chinook Winds in Lincoln City).

\(^1\) Source: The Road Information Program (TRIP). 2010. "Oregon's Transportation Choke Points. The Top 50 Choke Points and Remedies for Relief."

\(^2\) ODOT measures highway conditions using volume to capacity ratios that compare the traffic volumes of a roadway to the capacity of the roadway; above 0.80 congestion develops and above 1.0 the roadway fails and severe congestion results.
Figure 1 – Project Location
Table 1
Existing and Projected Traffic in Newberg and Dundee

<table>
<thead>
<tr>
<th>Intersection</th>
<th>2005 ADT</th>
<th>2005 v/c PM Peak</th>
<th>2030 ADT</th>
<th>2030 v/c PM Peak</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR 99W @ Springbrook</td>
<td>40,100</td>
<td>0.79</td>
<td>50,700</td>
<td>&gt;1.0</td>
</tr>
<tr>
<td>OR 99W @ College (downtown Newberg Couplet)</td>
<td>45,200</td>
<td>0.79 WB, 0.63 EB</td>
<td>63,400</td>
<td>0.86 WB, 0.76 EB</td>
</tr>
<tr>
<td>OR 99W @ Fox Farm Road (east Dundee city limits)</td>
<td>28,400</td>
<td>&gt;1.0</td>
<td>37,400</td>
<td>&gt;1.0</td>
</tr>
<tr>
<td>OR 99W @ 5th Street (downtown Dundee)</td>
<td>32,100</td>
<td>0.74</td>
<td>49,900</td>
<td>&gt;1.0</td>
</tr>
</tbody>
</table>

ADT – Average Daily Traffic
v/c – Volume to Capacity Ratio
WB – westbound traffic/EB – eastbound traffic

HISTORY AND DEVELOPMENT OF BUILD ALTERNATIVES

There have been numerous studies prepared since 1990 that considered the need for a bypass of the cities of Newberg and Dundee. Following are brief summaries of the major studies and their recommendations.

In 1990, ODOT published the “Rex Hill – Dayton Junction Reconnaissance Study (Newberg Bypass)” that considered options for a bypass of OR 99W. The study helped ODOT administration and the public make a decision on the feasibility of a bypass. The study focused on accessibility, the safe and efficient movement of through traffic, economic vitality, roadway safety, and the reduction of traffic congestion. ODOT prepared the alignments and estimated costs for a north, south, and extended south bypass route, improvements to the existing route, a Willamette River crossing, and a McKay Road to Dundee route. Subsequently, the city of Newberg and Yamhill County incorporated a southern bypass of OR 99W into their respective transportation system plans (TSP) in 1994 and 1995. Funding shortfalls postponed further action until the Oregon Legislature passed Senate Bill 626 in 1995, enabling ODOT to consider a bypass as a potential tollway.

In October 1996, ODOTs Economic Partnership Unit (EPU) moved forward with the alternatives development phase of the Newberg-Dundee Bypass project and changed the name to the Newberg-Dundee Transportation Improvement Project (NDTIP). This acknowledged the intent to equitably consider a full range of solutions to congestion on OR 99W. ODOTs objective was to select one or more solutions to the transportation problems on OR 99W, which were suitable for more detailed evaluation in a future project development phase. Selected solutions had to be feasible, implementable, and acceptable to the affected communities.

3 Source: Newberg-Dundee Bypass Tier 2 EIS Transportation Technical Memorandum
In 1997, FHWA issued a Notice of Intent to prepare a Location EIS. Within a year, the project had successfully developed Multimodal Alternative Packages (MAPs), some of which featured a bypass and some which did not. ODOT used a quantitative decision-making process that guided recommendations of the Project Oversight Steering Team (POST). The POST forwarded these alternatives to the Oregon Transportation Commission (OTC). The Alternatives Analysis Technical Report, published in 1997, documented the work program and results leading to the alternatives and considered MAPs. Of these, the report recommended three MAPs.

In September 2000, ODOT and FHWA began developing the Tier 1 or Location Draft EIS (LDEIS). At that time, the POST began developing the Purpose and Need statement. The range of solutions to congestion included a Transportation Management (including bus) alternative as well as two distinctively different bypass corridors. The Purpose and Need statement was crafted by the POST at this time, and a multimodal solution without a bypass was still under consideration.

After consideration by the POST, it was determined that the Transportation Management alternative alone could not meet the Purpose and Need statement and agreed that a bypass was needed. This was accomplished by the development of a minimum transportation performance threshold that all viable alternatives were required to pass. The Transportation Management (bus, bicycle, pedestrian, and local circulation improvements) alternative did not pass the threshold. When the POST rejected the Transportation Management Alternative as a stand-alone solution to congestion on OR 99W, it was not dropped from consideration. Rather, its objectives were added to every build alternative reaffirming the earlier commitment to more than just a highway solution.

The preferred Bypass alternative identified in the Tier 1 (Location) EIS bypasses a section of OR 99W that extends northeast across Yamhill County from the OR 99W/OR 18 intersection near the city of Dayton to Rex Hill on OR 99W just northeast of Newberg (see Figure 2). The preferred Bypass alternative is a corridor, approximately 11 miles long and at least 330 feet wide, along the south sides of Newberg and Dundee. The actual corridor width allowed for flexibility during the design phase. Depending on the segment of the Bypass in question, the actual bypass will require about 60% to 100% of the corridor width identified in the Tier 1 (Location) EIS.

The Tier 1 (Location) EIS has been completed and the Record of Decision was issued by FHWA in June 2005.

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4 The POST adopted a minimum transportation performance threshold with input from a broad spectrum of stakeholders heard a public meetings. The Build Alternatives had to achieve this threshold to meet project purpose and objectives to be included in further analysis. Recommendations from the public showed a great deal of consistency with standards set out in the Oregon Highway Plan (OHP). Consequently, the POST adopted the OHP volume to capacity (v/c) ratios for traffic congestion as a minimum performance threshold. These thresholds were a v/c of 0.75 within the Newberg and Dundee urban growth boundaries (UGB) and 0.70 outside of the UGBs.
The Tier 2 (Design/Construction) EIS process has developed an alignment (specific location) for the Bypass within the corridor approved in the Tier 1 EIS. In addition to the specific bypass alignment, the full project also includes four interchanges as well as required changes to local streets that must be relocated or improved to accommodate changes created by the Bypass or to improve local circulation to reduce demand on the state highway network. The full build alternative will be an 11-mile access-controlled expressway around the cities of Newberg and Dundee that will be four lanes, has an operating speed of 55 miles per hour, and will be fully access controlled.

The Tier 2 EIS public review period has been completed and the Final EIS is currently being prepared. The Record of Decision is expected to be issued in March 2012.

PROJECT DESCRIPTION

ODOT does not currently have sufficient funding to construct the entire Newberg-Dundee Bypass project. Over the last year, ODOT has been working with local stakeholders and the public to develop a first phase with independent utility that can be constructed with the available and reasonably anticipated funding. The Oregon Jobs and Transportation Act (JTA), passed by the 2009 Oregon Legislature, included $192 million for the Newberg-Dundee Bypass project, which is not enough to build the entire project or a logical first phase. The JTA does, however, provide a significant portion of funding
toward construction of a Phase One Bypass project, which will help relieve chronic congestion on OR 99W in Newberg and Dundee.

This application includes three separate pieces which will advance the Phase One Bypass project. Those pieces are described below.

**Newberg-Dundee Bypass Phase One**

Phase One of the Newberg-Dundee Bypass will begin at a new signalized intersection on OR 219 (at the location of the future interchange identified as part of the full Bypass), and travel through south Newberg into Dundee (see Figure 3). Southwest of Dundee, Phase One will leave the eventual full Bypass alignment, proceeding west parallel to the Dundee city limits, and cross over the Willamette and Pacific Railroad and OR 99W. After crossing over OR 99W, Phase One of the Bypass will loop around and connect to OR 99W at a new signalized intersection. The Phase One connection to OR 99W will be removed when the Bypass is extended to OR 18 in Dayton. Phase One will not include construction of the East Dundee Connector Road or interchange or the grade-separated interchange at OR 219. The Phase One Bypass will include one travel lane in each direction, located on the westbound travel lanes of the eventual full Bypass. Other Phase One improvements include:

- Additional southbound left-turn lane on OR 99W at Springbrook Road.
- Widening OR 219 to five lanes between Springbrook Road and the new Bypass signalized intersection on OR 219 with shared shoulders/bicycle lanes and full sidewalks (bicycle and pedestrian facilities do not currently exist along this local street).
- Constructing a traffic signal at the new Bypass intersection with OR 99W southwest of Dundee.
- Widening westbound OR 99W southwest of the new Bypass intersection to two travel lanes in order to accommodate the new traffic signal.
- Widening eastbound OR 99W southwest of the new Bypass intersection to include two left-turn lanes onto the Phase One Bypass at the new traffic signal.
- Improvements to local streets to ensure continued connectivity in the area of the Bypass connections to the existing system.

**Figure 3 – Newberg-Dundee Bypass Phase One**
A more detailed map of the Phase One project can be viewed at:

http://www.oregonjta.org/region2/files/ph1bypass-overall2.pdf

**Springbrook Road Upgrade**

ODOT recognizes that moving traffic from OR 99W to the Phase One Bypass intersection with OR 219 will involve diversion of state highway traffic to local roads, creating significant impacts to roads that are not currently designed to handle this level of traffic. Until the construction of the northern leg of the Bypass, the principle connection between OR 99W and the Bypass will be Springbrook Road (see Figure 3). Springbrook Road is currently a two-lane facility with narrow shoulders and limited sidewalks. It is not currently configured to handle the traffic volumes that will be diverted onto it by construction of the Phase One Bypass project (see Figure 4). The road currently provides access to low-density residential and industrial land uses within the city of Newberg. The city’s TSP designates Springbrook Road as a Minor Arterial. The typical section for a minor arterial in Newberg is one travel lane in each direction, a two-way center turn lane, and bicycle lanes, landscape strips, and sidewalks on both sides. As part of the Phase One project, Springbrook Road will be upgraded to the city’s minor arterial standard. This will provide additional capacity between OR 99W and the Bypass, as well as safe bicycle and pedestrian facilities that will better connect residential and industrial uses in the area to the rest of the city and provide safer travel opportunities for non-motorized users. The upgrade will also include installation of a traffic signal at the Springbrook Road/Fernwood Road intersection. This improvement to Springbrook Road is an added component (not required for the full Bypass) that is necessary to ensure that the Phase One Bypass project and connecting infrastructure functions at an acceptable level. Because it will be built to the City’s minor arterial standards, this improvement will continue to have utility when the full Bypass is constructed and the diverted traffic returns to the state highway system.

A detailed map of the proposed improvements to Springbrook Road can be viewed at:


**Dundee to Newberg Connector (Bicycle/Pedestrian Facility)**

The Dundee to Newberg Connector (DNC) is the first phase of a large regional pedestrian and bicycle system identified as the Chehalem Heritage Trails. The system will provide...
pedestrian and bicycle access to key cultural, environmental, and community points of interest in the Newberg-Dundee area. The trail system will greatly improve surface transportation for the Dundee and Newberg communities and provide a safe alternative to OR 99W for pedestrians and bicyclists, away from high-speed traffic and recurring congestion; this is expected to help take local trips off OR 99W. The development of the DNC helps fulfill the multimodal objectives of the overall Newberg-Dundee Transportation Improvement Project.

The 2.5 mile DNC will complete bicycle and pedestrian access between the downtown area of Newberg and Dundee, connect important park, school (will provide new and safe access to nine existing and two planned schools), work, cultural, business, and environmental destinations for non-motorized users. This is an important connection in the regional bicycle/pedestrian circulation network that could not be funded from the Jobs and Transportation Act funds as state highway funds cannot be used for off-street trails. It will assist the Chehalem Parks and Recreation District (CPRD) in developing components of a multi-modal transportation system in Yamhill County. The proposed DNC route is shown on Figure 5.

**Figure 5 – Dundee to Newberg Connector**
Project Participants

The Oregon Department of Transportation is the applicant for this TIGER III grant and will be the recipient of the grant funds. ODOT has been assisted through the process by a number of agencies and stakeholders including:

- **Local Jurisdictions** – Yamhill County and the cities of Newberg, Dundee, and Dayton have been directly involved throughout the process of developing the Bypass project. In addition to participating in project development, these jurisdictions have completed amendments to their respective comprehensive plans (including TSPs), as required by Oregon land use law, to incorporate the project.

- **Local Stakeholders** – ODOT has actively worked with several local stakeholder groups who are interested in advancing the project. The most active is the Yamhill County Parkway Committee, a group formed specifically to advocate for the Bypass project. Other interested stakeholder groups include the various Chambers of Commerce in Yamhill County, the city of McMinnville, the McMinnville Economic Development Partnership, the Dundee Civic Association, and the Newberg Downtown Coalition. Finally, the CPRD is an active participant and sponsor of the Dundee to Newberg Connector portion of this grant application.

Budget and Financing Plan

ODOT is requesting $17,000,000 in TIGER III funds to fill the remaining gap to fully fund the Newberg-Dundee Bypass Phase One project. The total project cost is currently estimated at $262,613,968. The requested funds, accompanied with an adjustment in scope to shorten the project (refined designs and cost estimates are currently being prepared which will lower the total project cost to $240-250 million), will allow the TIGER III funds to provide the amount necessary for completion of the Phase One project. The following table lists the various sources of committed funds and the funding gap, based on the original cost estimate.

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Amount</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jobs and Transportation Act (State Funds)</td>
<td>$192,000,000</td>
<td>73%</td>
</tr>
<tr>
<td>Federal Earmarks</td>
<td>$12,124,423</td>
<td>5%</td>
</tr>
<tr>
<td>Federal STP</td>
<td>$8,489,545</td>
<td>3%</td>
</tr>
<tr>
<td>Local Funds</td>
<td>$20,000,000</td>
<td>8%</td>
</tr>
<tr>
<td>Unfunded</td>
<td>$30,000,000</td>
<td>11%</td>
</tr>
</tbody>
</table>

The $17 million requested in this grant application represents approximately 57% of the unfunded balance, but only about 6% of the total project cost. The local funding component will be provided by Yamhill County and the cities of Newberg, Dundee, and McMinnville. Those jurisdictions are currently working to determine the share that each
will be responsible for. If this grant application is approved, the federal share of the project will be only about 14% of the total.

**SELECTION CRITERIA**

*Primary Selection Criteria*

*Long-Term Outcomes*

*State of Good Repair*

OR 99W in the project area is designated as a statewide level of importance highway and freight route by the Oregon Highway Plan, but it also serves as the Main Street for Newberg and Dundee. This existing highway currently carries approximately 39,000 daily trips at Springbrook Road in Newberg, nearly 45,000 in downtown Newberg, and 32,000 in downtown Dundee. OR 99W has four to six travel lanes through Newberg and two travel lanes (with two-way center turn lane) in Dundee. Phase One of the Bypass project is projected to reduce traffic, including a substantial number of heavy trucks, on OR 99W by about 20% in Newberg and close to 40% in Dundee. This traffic reduction will reduce long-term impacts to the condition of the OR 99W pavement and reduce life cycle costs for pavement maintenance.

*Economic Competitiveness*

OR 99W in the project area is designated as a statewide level of importance freight route by the Oregon Highway Plan. About 7% of the total traffic on the highway is larger than 2-axle vehicles (1,700 to 2,700 vehicles per day depending on location). Further, the existing highway experiences a 50% increase in travel time westbound in the PM peak period and 30-40% in the eastbound direction in the AM peak. Construction of the Bypass is projected to reduce travel time on OR 99W and through Newberg and Dundee by 50-60% in the peak period. This reduction in travel time, along with improved connections to the regional transportation system will improve the ability of Yamhill County’s significant agricultural (wineries and commercial nurseries) and manufacturing businesses to export their products to local, regional, and national markets. Examples from specific sectors are illustrative of this point.

**Manufacturing**

There are 230 manufacturing businesses in Yamhill County. Most of these are small and medium-sized manufacturers producing a wide variety of products that are dependent on surface transportation to reach local, regional, and national markets. There are currently **522 acres** of vacant industrially zoned land in the county that has the potential to create over **5,200 manufacturing jobs**. These jobs annually pay an average of **$37,720**. Recruiting manufacturing businesses has been difficult because good transportation infrastructure is generally one of

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5 Source: Mid-Willamette Valley Council of Governments
6 Source: Oregon Employment Department, 2010
the top five criteria that a business uses; the county’s distance from the I-5 corridor and the significant congestion on OR 99W between Yamhill County communities and the Portland Metropolitan Area are a significant limitation on the ability to efficiently get manufactured goods to market. The former mayor of the city of McMinnville stated that the city lost over 1,000 manufacturing jobs when three major firms moved in the late 1990s, citing the congested OR 99W corridor as a major reason.

Wineries
The sum of all economic activity in the state of Oregon directly and indirectly related to wine is over $2.7 billion annually, including direct employment of over 7,600 people in activities related to wine production, distribution, and sales. Yamhill County is at the center of the Oregon wine industry. In 2010, 30% (255) of the wineries and 32% (6,511 acres) of the total vineyard acreage statewide was located in Yamhill County.\(^7\) Tourism (and onsite sales of wine) is an important aspect of the wine industry, however, most Yamhill County wineries are dependent on surface transportation to produce and ship their product. Congestion on OR 99W restricts various aspects of winery operations including timely delivery of grapes to processing during harvest, increased freight costs, and consumer access to wineries and onsite wine sales. Yamhill County wineries indicate they would expand to create more jobs if congestion were reduced or eliminated. Additionally 59% of wine produced in Oregon is sold in markets in other states and about 3% to international markets, further demonstrating the need for an efficient surface transportation system.\(^8\)

OR 99W is part of the principal connection between the Portland metropolitan area and the central Oregon Coast. The central Oregon Coast is not only one of Oregon’s premier tourist destinations, but also the center of Oregon’s commercial fishing industry which is dependent on surface transportation to get its product to market.

Finally, Yamhill County is defined as an Economically Distressed Area as that term is defined in the TIGER III notice. The project will improve the efficiency of surface transportation facilities in the area, enhancing the competitiveness of the various industry sectors that are represented in the County and that are dependent on surface transportation to receive raw materials and transport their products to local, regional, and national markets.

Livability
It is projected that existing traffic volumes on OR 99W will decrease by about 20% in downtown Newberg and about 40% in downtown Dundee immediately after construction of the Bypass. This includes a significant reduction in freight traffic in downtown Newberg.

Newberg and Dundee (a reduction of 1,500 freight vehicles per day – 45% reduction in downtown Newberg and 68% reduction in downtown Dundee). This will improve livability in both downtowns by reducing noise, improving air quality, and improving travel conditions for bicyclists and pedestrians. The project will complete improvements on Springbrook Road in Newberg, upgrading it to an urban minor arterial standard and also improving travel conditions for bicyclists and pedestrians. Until subsequent phases of the Bypass are constructed, Springbrook Road will be the connection between OR 99W and the eastern terminus of the Bypass. Springbrook Road is currently a two-lane road with limited sidewalks and shoulders. This road will be reconstructed to Newberg’s Minor Arterial standard, including a center turn lane, curbs and gutters, transit pullouts, and full sidewalks and bike lanes. Further, implementation of the Dundee to Newberg Connector trail project will provide a safe and convenient bicycle and pedestrian facility parallel to the Bypass and OR 99W that will allow bicyclists and pedestrians to avoid these high-speed facilities.

The 2010 Oregon Legislature adopted House Bill 1059, a statewide, comprehensive bill aimed at reducing greenhouse gas emissions from transportation. In response to this bill, ODOT has initiated the Oregon Sustainable Transportation Initiative (OSTI)9 which is directed at helping the state meet long-term reductions in greenhouse gas emissions. The majority of the work currently underway is directed at reductions in the metropolitan planning organization areas in the state. Any project that improves the efficiency of transportation systems, however, (such as the Newberg-Dundee Bypass Phase One) works toward achieving the long-term statewide goals of OSTI.

Yamhill County Transit Area (YCTA) provides fixed-route and other transit services in Yamhill County. YCTA currently operates morning and afternoon express bus service between McMinnville and Tigard, where their service connects to the many transit services (bus, light rail, commuter rail) available in the Portland metropolitan area. Completion of the Bypass will improve the efficiency of that express service that helps them maintain a more reliable schedule in less congested conditions.

Finally, ODOT worked with the affected local jurisdictions to develop a facility plan for the Bypass which the Oregon Transportation Commission (OTC) adopted in 2006. This plan and the OTC adoption require that the Bypass be fully access controlled. This, along with the cities’ urban growth boundaries, will ensure that the Bypass will not result in increased sprawl or pressure for additional access associated with new development.

**Sustainability**

By reducing congestion, operation of the existing OR 99W and the Bypass will be more efficient, resulting in reduced fuel consumption and, as a result, reduced emissions of greenhouse gases and other transportation-related pollutants. ODOT's implementation of

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9 The Oregon Sustainable Transportation Initiative is an integrated statewide effort to reduce greenhouse gas (GHG) emissions from transportation while creating healthier, more livable communities and greater economic opportunity. This effort is the result of several bills passed by the Oregon Legislature, and is designed to help the state meet its 2050 goal of reducing GHG emissions by 75% over 1990 levels.
“practical design”\textsuperscript{10} concepts and strict access control will ensure an appropriately scaled project that serves local and regional travel. Implementation of these concepts, along with the existence and implementation of Oregon’s statewide planning program (which requires establishment of urban growth boundaries and implementation of local comprehensive plans and zoning ordinances) will significantly limit opportunities for exurban growth and sprawl. The project is also being designed to consider and reduce environmental impacts. Specific examples are the inclusion of six bridges over streams (rather than culverts) to enhance fish passage and restoration/enhancement of approximately 90 acres of riparian habitat owned by the Chehalem Parks and Recreation District.

What is more, the improvements to bicycle and pedestrian infrastructure will increase the number of trips taken by non-motorized modes, reducing energy use and emissions from the transportation system.

\textit{Safety}

Currently, much of OR 99W in the study area, has crash rates that exceed the statewide average for similar facilities. Many of the crashes on the highway can be related to the significant traffic volumes, mix of traffic, and an existing highway design that is inadequate to handle the traffic demand in the study area. Further, ODOT's 2011 Safety Priority Index System (SPIS) has identified six sites on OR 99W within the study that are within the top 10\% of crash sites statewide based on frequency and severity of incidents (the 2011 SPIS Report is based on crash data for the years 2008-2010). A summary of the SPIS sites is contained in Table 3.

For the time period evaluated, there was one fatality and seven serious injuries resulting from the crashes at these sites. 52 crashes resulted in property damage only.

Construction of the Bypass will reduce traffic volumes on OR 99W to a level that is more appropriate for its current design and role as the local Main Street. This reduction in traffic volume and associated change in highway function (from all-purpose state highway to local arterial) is expected to result in improved traffic safety. The reduction in traffic volumes and conflicts, along with the additional facilities proposed with the project, should also result in increased safety for bicyclists and pedestrians.

\textsuperscript{10} “Practical Design” is a strategy developed to reduce cost and still deliver tangible benefits to the traveling public from investments made. At a minimum, it considers safety, economic development, communities if a project passes through them, the environment, the overall transportation system (not just highways), and cost. Practical design is a systematic approach to deliver the broadest benefits to the transportation system within the existing resources by establishing appropriate projects scopes and design guidelines to deliver specific results.
Table 3
SPIS Sites in Newberg-Dundee Bypass Study Area\textsuperscript{11}

<table>
<thead>
<tr>
<th>Route</th>
<th>Beginning Mile Point</th>
<th>Ending Mile Point</th>
<th>Length</th>
<th>2010 ADT</th>
<th>Crashes</th>
<th>SPIS Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR 99W</td>
<td>21.71</td>
<td>21.89</td>
<td>0.18</td>
<td>34,100</td>
<td>19</td>
<td>56.05 (top 5%)</td>
</tr>
<tr>
<td>OR 99W</td>
<td>21.96</td>
<td>22.14</td>
<td>0.18</td>
<td>34,100</td>
<td>42</td>
<td>77.80 (top 5%)</td>
</tr>
<tr>
<td>OR 99W</td>
<td>22.80</td>
<td>22.98</td>
<td>0.18</td>
<td>39,100</td>
<td>25</td>
<td>60.43 (top 5%)</td>
</tr>
<tr>
<td>OR 99W</td>
<td>24.91</td>
<td>25.09</td>
<td>0.18</td>
<td>28,000</td>
<td>6</td>
<td>50.35 (top 10%)</td>
</tr>
<tr>
<td>OR 99W</td>
<td>25.44</td>
<td>25.62</td>
<td>0.18</td>
<td>28,000</td>
<td>17</td>
<td>69.03 (top 5%)</td>
</tr>
<tr>
<td>OR 99W</td>
<td>25.74</td>
<td>25.92</td>
<td>0.18</td>
<td>28,000</td>
<td>15</td>
<td>52.61 (top 10%)</td>
</tr>
</tbody>
</table>

\textit{ADT} – Average Daily Traffic

\textit{Note} – the study area on OR 99W is between mile points 20.50 and 29.85

Congestion on OR 99W is also an impediment to the timely provision of life safety (police and fire) services in the area. Chief John Stock of the Yamhill County Fire Defense Board and the Dundee Fire Department states:

“Congestion on 99W also degrades response times for not only my Fire Department but also for mutual aid responses from neighboring cities such as Newberg, Dayton or McMinnville. Further, emergency transportation services for several Yamhill county cities west of Dundee rely on 99W to transport critically ill patients to Providence Newberg Medical Center or to other hospitals in the greater Portland area. Delays due to congestion on 99W places these patients at greater risk and also ties up important assets should other patients need to be transported.”

\textbf{Job Creation and Near-Term Economic Activity}

The Newberg-Dundee Bypass Phase One project will help create a large number of jobs in an economically distressed area. ODOT’s commitment to equal opportunity for all workers and disadvantaged businesses will ensure that all groups have the opportunity to benefit from the investment of federal resources in the project.

The project will begin construction in 2014. A total of $240-250 million will be expended on construction and construction-related activities by all parties participating in the project. This will result in the creation and/or preservation of between 3,360 and 3,500 family wage construction-related jobs over the life of the project (2-3 years) based on 14 jobs created for each $1 million expended. The project will also improve long-term job creation by improving access to existing and planned employment centers in Yamhill County (as stated above, vacant industrially zoned land in the county could potentially produce 5,200 new jobs). Yamhill County wineries in the Newberg-Dundee

\textsuperscript{11} Source: 2011 ODOT Safety Priority Index System Report
area have also indicated they are interested in expanding operations and creating jobs if congestion in the OR 99W corridor is significantly reduced or eliminated.

**Job Creation in an Economically Distressed Area**

The population most likely to benefit from the creation and preservation of jobs are from economically distressed areas. The city of Newberg and Yamhill County are formally recognized by FHWA as being economically distressed areas. The city of Newberg is identified as economically distressed for both income and economic criteria. Also, the per capita income in Yamhill County is lower than both the state and national levels for 2006 (the last year presented data is available). Yamhill County’s per capita income was $31,044, where the state was $33,299, and the national per capita income was $36,714. As a result, it is likely that the family-wage jobs supported by this project will result in employment benefits for economically distressed populations.

**Opportunities for Low Income Workers**

The Newberg-Dundee Bypass Phase One project will implement best practices, consistent with the nation’s civil rights and equal opportunity laws, ensuring that all individuals, regardless of race, gender, age, disability, and national origin, benefit from the project. The Oregon Department of Transportation has an Office of Civil Rights (OCR) that offers many programs that monitor practices and ensures compliance with federal programs and requirements. The OCR has lead ODOT’s successful efforts to ensure that minorities and women have opportunities to work with the state.

The Newberg-Dundee Bypass Phase One project will promote the creation of job opportunities for low-income workers through the use of best practice hiring programs and utilization of pre-apprenticeship and apprenticeship programs. The project will also use community-based organizations (CBO) in connecting under-employed workers with economic opportunities. ODOT has an aggressive recruiting package in place for hiring of employees within specific categories. Within this package are included pre-apprenticeship programs for creating opportunities for individuals with little or no prior government experience. In addition to using outreach methodologies in the Portland metropolitan area, efforts are also present state-wide and in the more rural areas. ODOT has also developed a Workforce Development Program that is engaging local partners, including community groups, community colleges, high schools, and educational service providers, in offering on-the-job training and supportive services, much of it targeted at underprivileged groups.

The Newberg-Dundee Bypass Phase One project will support entities that have a sound track record on labor practices and compliance with federal laws and requirements ensuring that American workers are safe and treated fairly. ODOT has a Civil Rights Compliance Tracking (CRCT) database in place to ensure that contracts are being progressed in accordance with applicable federal and state requirements. When non-

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12 Source: [http://hepgis.fhwa.dot.gov/hepgis](http://hepgis.fhwa.dot.gov/hepgis)
compliance issues are identified, there are mechanisms in-place for corrective actions to be taken to ensure that there are not recurring non-compliant conditions.

Opportunities for Disadvantaged Businesses

The Newberg-Dundee Bypass Phase One project will support ODOT's commitment to creating opportunities and growing small businesses. Realizing that Oregon's small businesses are the backbone of the state's economy, ODOT has developed a management strategy that is referred to as the “Continuum Strategy” that is promoted from the Director’s Office and embraced throughout the agency. At the heart of this strategy is ODOT's DBE Program, a cohesive approach to developing and fostering opportunities for DBE firms. This holistic approach has resulted in ODOT focusing on a continuum of supportive services and outreach that start with the identification of “young” DBE firms, assessing capacity, identification of developmental needs, offering training and other tools, and culminating in contracting opportunities with ODOT's prime contractors on construction projects. From ODOT's perspective we must do more than simply provide contracting opportunities. The goal is to constantly grow the number of ready, willing, and able DBE firms that will be available to meet the demands of increased contracting over the years to come. Below is an outline of the various initiatives that comprise our “Continuum Strategy”:

- **Mentor Protégé Program**: ODOT participates in the approved Mentor Protégé Program managed by the Port of Portland. From 2008 to 2010, ODOT funded three Mentor Protégé partnerships, and is planning on expanding the support to add three more on a staggered basis so there will be six at any given time. This is an annual program.
- **SBDC Business Management training**: The curriculum for this training was developed for the state's Emerging Small Business Program, but in 2009 funding was added to support participation by certified DBE firms. This program is renewed for each biennium.
- **Quarterly Training workshops**: ODOT hosts quarterly workshops and certification events to provide small businesses a variety of training on topics of value to all small businesses.
- **Annual goal and project-specific goals**: Per DBE Program requirements, ODOT calculates an annual DBE Aspirational Goal which includes a breakout of the portion to be achieved through race-conscious means. Project-specific goals for DBE inclusion are calculated using the availability of DBE firms when compared to the work expected to be included in the project. Both race-conscious and race-neutral DBE participation are tracked and reported.
- **Turner School of Construction Management**: ODOT has supported this training program for the past five years, and helps recruit firms and fund the program. The success rate for this program is demonstrated by having graduated an average of 33 small businesses each year. This is an annual program.
- **Business Development Institute (BDI)**: This group organizes and coordinates the annual MED Week Conference, as well as providing a forum for interagency discussions regarding assistance to minority-owned businesses. ODOT staff attends the BDI meetings and help with organization functions.
• **Mandatory pre-bids meetings:** Many of ODOT's projects require a mandatory pre-bid meeting for bidders, and potential subcontractors, including DBE firms, are encouraged to attend. In addition to project related technical discussion, a networking environment is established to bring prime contractors and small firms together. These pre-bids are held on most projects.

### Secondary Selection Criteria

**Innovation**

ODOT will control access to the Bypass, ensuring that the only access to the facility will be at the ends in Newberg and just west of Dundee. Implementation of full access control along with local comprehensive plans and zoning (consistent with Oregon’s statewide planning program) will ensure that future land use and economic development opportunities are appropriately focused within each city’s urban growth boundary.

**Partnership**

ODOT has a long partnership relationship with Yamhill County and the cities of Newberg and Dundee in the development of this project. Evidence of this partnership includes amendments to each city’s and the county’s comprehensive plans to include and protect the Bypass project alignment, and financial commitments outlined in the Finance Plan above. ODOT has worked closely with the Chehalem Parks and Recreation District in the development of, and inclusion in this application, the Dundee to Newberg Connector bicycle/pedestrian project. ODOT has also worked with CPRD to avoid impacts to other district facilities in developing the alignment for the Bypass. These facilities include the Chehalem Glenn Golf Course and approximately 90 acres of riparian habitat owned by the District that ODOT will improve as part of the mitigation program for Bypass environmental impacts. ODOT has worked directly with the Yamhill County Parkway Committee, a local citizens group dedicated to advancing the Newberg-Dundee Bypass project. The project also has the strong support of the Mid-Willamette Valley Area Commission on Transportation (MWACT), a group that advises the Oregon Transportation Commission on transportation issues. MWACT has long rated the Bypass project as one of its highest modernization priorities. Numerous local agencies, organizations, and businesses are supportive of the Bypass. Letters expressing this support are attached to this application and are provided at the project website (link provided below).

**Results of Benefit-Cost Analysis**

A benefit-cost analysis has been completed for the project. The entire report is attached at the website referenced below. The following summarizes the results of the analysis.

The project is described as a capital project with a net present value of $193.1 million. The calculated benefit-cost ratio is 1.99. A summary of the data is provided in Table 4.
These calculated values exclude the social benefits of improved safety. Safety benefits are believed to be significant, but have not been calculated as they would require a major study to quantify. This is difficult because the project will replace multiple, medium to low speed, urban segments having widely different safety records, with a single, modern, high-speed, rural segment.

The EIS preliminary results have modeled peak hour vehicle hours of travel (VHT) with and without the project. However, off-peak VHT was not modeled. Other modeling data indicates the new Bypass will reduce travel time by five minutes per trip during off-peak periods. Therefore, the value of time saved as a result of the project is shown in two separate categories in the analysis: Reduced peak vehicle hours of delay, and Reduced off-peak vehicle hours of delay for through traffic.

### Table 4
**Benefit-Cost Analysis Summary Data**

<table>
<thead>
<tr>
<th>Present Value of Capital Costs</th>
<th>($195,866,877)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present Value of State of Good Repair Benefits</td>
<td>$6,041,712</td>
</tr>
<tr>
<td>Present Value of Economic Competitiveness Benefits</td>
<td>$271,072,846</td>
</tr>
<tr>
<td>Present Value of Livability Benefits</td>
<td>$2,572,978</td>
</tr>
<tr>
<td>Present Value of Environmental Sustainability Benefits</td>
<td>$23,020,323</td>
</tr>
<tr>
<td>Present Value of Safety Benefits</td>
<td>$0</td>
</tr>
<tr>
<td>Present Value of Residual Value</td>
<td>$87,685,657</td>
</tr>
<tr>
<td>Present Value of Maintenance Costs</td>
<td>($1,445,913)</td>
</tr>
<tr>
<td><strong>Present Value of Benefits Total</strong></td>
<td><strong>$388,947,603</strong></td>
</tr>
<tr>
<td><strong>Net Present Value</strong></td>
<td><strong>$193,080,726</strong></td>
</tr>
<tr>
<td><strong>Benefit-Cost Ratio</strong></td>
<td><strong>1.99</strong></td>
</tr>
</tbody>
</table>

Induced travel in terms of trips is expected to be minimal. When traffic volumes for the Bypass and existing roads area combined, the models in use indicate the traffic volumes on some segments will have higher traffic volumes, while other segments will have lower volumes. As the new route is longer, additional vehicle miles of travel will occur, which is reflected in the fuel consumption and greenhouse gas emissions figures.

Finally, as this is an application for capital funds, the present value of maintenance costs was treated as a negative benefit rather than as another investment cost. Either way, the effect on the benefit:cost ratio is minimal.

The cost calculations use a three percent discount rate, consistent with the guidance from the August 12, 2011 Federal Register for a public investment.
PROJECT READINESS AND NEPA

ODOT has been working with FHWA and local partners to complete the environmental review process. The Tier 1 (Location) EIS has been completed and the Record of Decision was issued in June 2005. As part of the process to complete the Tier 1 EIS, the cities of Newberg and Dundee, and Yamhill County completed amendments to their comprehensive plans to include the Bypass corridor. The Tier 2 (Design/Construction) EIS is currently in preparation. The public review period was completed in June 2010, and the final EIS is being prepared. The Final Tier 2 EIS is scheduled to be issued in February 2012 and the Record of Decision is expected in March 2012. ODOT will be prepared to obligate the awarded TIGER III grant funds in April 2012.

The remaining tasks to advance the project to construction include completion of the final design, acquisition of all required right-of-way, and the bid-let. Since the completion of the Tier 1 EIS, ODOT has worked with willing sellers to acquire right-of-way in the corridor.

The schedule for the remaining tasks is as follows:

<table>
<thead>
<tr>
<th>Task</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 2 EIS Record of Decision</td>
<td>March 2012</td>
</tr>
<tr>
<td>Obligation of TIGER III Grant Funds</td>
<td>April 2012</td>
</tr>
<tr>
<td>Plans, Specifications, and Estimates (PS&amp;E)</td>
<td>Winter 2013</td>
</tr>
<tr>
<td>Complete Right-of-Way Acquisition</td>
<td>Spring 2014</td>
</tr>
<tr>
<td>Bid-Let</td>
<td>Spring 2014</td>
</tr>
<tr>
<td>Begin Construction</td>
<td>Summer 2014</td>
</tr>
</tbody>
</table>

Legislative Approvals

As stated above, the Newberg-Dundee Bypass Phase One project received $192 million in funding from the Oregon Legislature’s 2009 Jobs and Transportation Act. Award of this level of funding is a reflection of the high priority accorded this project. No further legislative approvals are required.

State and Local Planning

The Bypass project has successfully completed Oregon’s extensive state and local land use and transportation planning process. In addition to the environmental documents, the comprehensive plans of Yamhill County, Newberg, Dundee, and Dayton were updated to include the Bypass. All necessary planning actions have been completed.

Technical Feasibility

Substantial preliminary engineering work has been completed for the Phase One project as illustrated in the graphics in the Project Description. The technical feasibility of the Bypass basic design was evaluated in the Tier 2 EIS, which is in the process of being finalized for approval and issuance of the Record of Decision by FHWA.
Financial Feasibility

The cost estimate for the project was recently updated to include a more detailed and rigorous cost analysis of engineering, right-of-way, utility relocation, construction, and contingencies. These estimates are reflected in the Budget and Finance Plan above. The costs included herein will be updated and refined at the major phases of preliminary, advance, and final plans. The scope of the project has been adjusted, assuring that the funding described above, including the TIGER III grant, is anticipated to cover the estimated costs. Full funding will be certified at the time the project is advertised for construction bidding.
FEDERAL WAGE RATE CERTIFICATION

If this project is selected for TIGER III Discretionary Grant funding, the Oregon Department of Transportation will comply with the requirements of subchapter IV of Chapter 31 of Title 40, United States Code.

Sincerely,

Matthew L. Garrett
Director

CHANGES TO PRE-APPLICATION

The pre-application states that the total project cost will be $272 million. The scope and extent of the Phase One Bypass project has been adjusted to lower the estimated project cost to $240-250 million, assuring that the grant requested will cover the remaining unfunded balance. No other changes to information contained in the pre-application have occurred.

ADDITIONAL MATERIAL AVAILABLE ON WEBSITE

Additional materials supporting this TIGER III grant application may be reviewed on the following website:

http://www.oregonjta.org/region2/?p=project-library

Materials on the web page include the Tier 1 and Tier 2 environmental impact statements, the full benefit/cost analysis, and letters or resolutions that have been submitted in support of the Newberg-Dundee Bypass project and this TIGER III grant application (the support letters are also attached to this application).